



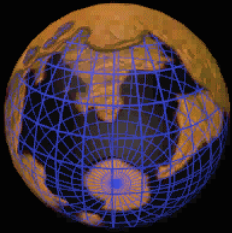
# Private Sanitary Sewers Operating Permit Program

WHAT YOU NEED TO KNOW TO COMPLY  
WITH THE ORDINANCE REQUIREMENTS

Prepared by:

DERM - Wastewater Section





# VSCO

- Volume Sewer Customer Ordinance
- Miami-Dade County Ordinance 96-166
  - Required by the Second and Final Partial Consent Decree between EPA and Miami-Dade County (1994)
- Effective November 12, 1997
- Provides Regulations for Publicly and Privately Owned Sanitary Sewer Collection Systems
- Ordinance was incorporated into Chapter 24 of the Miami-Dade County Code (24-3; 24-13; 24-35)
- Intended to reduce or eliminate Infiltration / Inflow (I/I) into the sanitary sewer system



PSO

- Formerly known as:

*“Private Pump Station Operating Permit”*

- Currently known as:

*“Private Sanitary Sewers Operating Permit”*



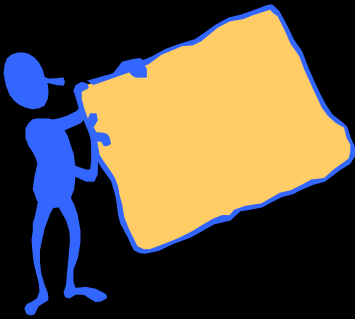
# *PSO Changes / New Requirements*

- Changes
  - Regulates private collection systems
  - Additional Documentation
  - New fee schedule
- New Requirements
  - Facilities with at least 1,000 L.F. of pipe, 6 in. or larger, require an operating permit from DERM
  - Annual Reports
  - All facilities MUST submit an Operation & Maintenance Manual (O&M) and a Sanitary Sewer Evaluation Survey (SSES)

# *Private Collection Systems*



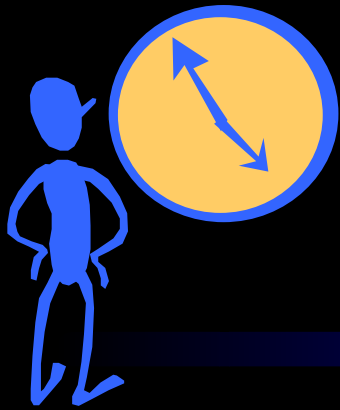
- Sanitary Sewer Collection Systems (SSCS) with at least 1,000 L.F. of pipe, 6 in. or larger, require an operating permit
  - Applies to:
    - gravity lines only
    - Lines outside of building footprint
    - SSCS with or without sanitary pump stations



# *New Fee Schedule*

- Only Applies to facilities that meet the 1,000 L.F. criteria

	<u>Effect.10/01/02</u>	<u>Effect.10/01/03</u>
– 4 in. pipe:	No Charge	No Charge
– 6 in. pipe:	\$0.12/LF	\$0.12/LF
– 8 in. pipe:	\$0.17/LF	\$0.20/LF
– >8 in. pipe:	\$0.23/LF	\$0.26/LF
- Sanitary Pump Station fee remains at \$110.00 each
- Facilities which did not provide site information were assessed a fee based on the facility acreage at \$52.90 per acre



# *DEADLINES* *(Required)*

- **Due July 1, 1999**
  - Operations & Maintenance (O&M) Manual
  - Plan & Schedule for Sanitary Sewer Evaluation Survey (SSES)



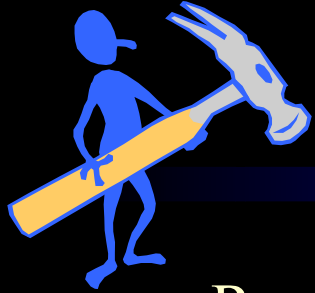
# *ANNUAL REPORT*

- Required for all facilities regardless of size, use, type, flow, etc.
- Three types of report forms:
  - Facilities with Sanitary Pump Stations only
  - Facilities with Sanitary Collection System only
  - Facilities with both, sanitary pump station and collection system
- Purpose of the annual report:
  - Document changes of the SSCS during the previous year
  - Document sources of I/I
  - Document ongoing or completed rehabilitation work



# *OPERATIONS AND MAINTENANCE (O&M) MANUAL*

*(Due July 1, 1999)*



- Required for all facilities
- Shall provide accurate and adequate information for the specific facility
- Should be prepared by a competent person
- Sample of O&M manual provided
  - Sample can not be copied and submitted as supplied

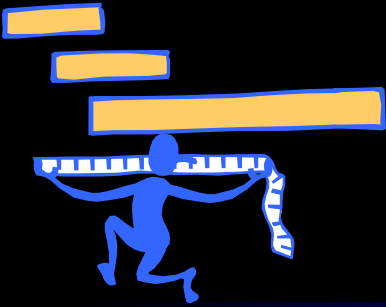
# *Sanitary Sewer Evaluation Survey (SSES)*

## *Who, Why, When, How*

- Required for all facilities
- Intended to identify sources of infiltration / inflow into the sanitary sewer system
- Plan and Schedule for the SSES, due July 1, 1999
- Complete SSES, due November 12, 2002
- Survey and rehabilitation shall be carried out incorporating provisions set forth in the U.S. EPA's Sewer System Infrastructure Analysis and Rehabilitation Handbook

# *Sanitary Sewer Evaluation Survey (SSES)*

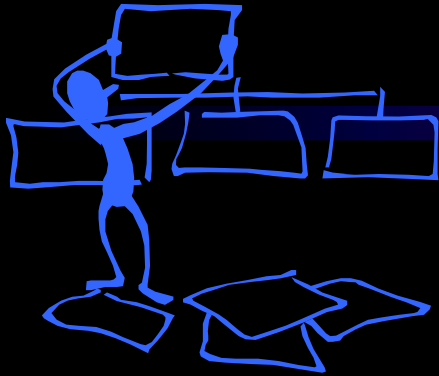
- Allowed I/I Rate (also known as "Performance Standard")
- Pursuant to Section 24-13.1(A)(4)
  - 5,000 gpd per inch per mile of pipe
  - Allowed rate calculations shall include all laterals.
- Cycle Definition
  - Evaluation must be completed during first five year period, and each ten year period thereafter
  - Rehabilitation work performed within period of July 1, 1992 to present can be credited towards the first cycle



## *Plan and Schedule for Sanitary Sewer Evaluation Survey (Due July 1, 1999)*

- The plan shall include as a minimum the following:
  - The scope of the survey
  - A list of locations where flow will be measured
  - How the flow will be measured
  - The methods to be used for examination of the internal condition of the mains
  - Who will perform the survey
- The schedule shall include at the minimum the following:
  - Date of commencement of work
  - Time period during which flows will be measured
  - Date of completion of field work
  - Date of completion of evaluation survey by contractor
  - Date of delivery to DERM.

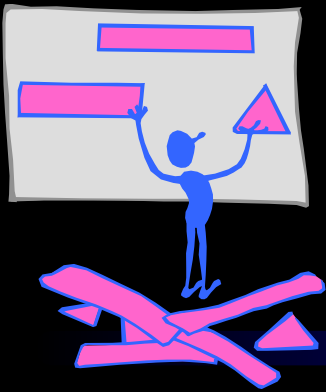
# *DERM's Implementation Plan for the SSES Small Facilities*



## **Plan A:**

- Measure sanitary sewer system piping
- Smoke testing
- Manhole inspection
- Minor repairs
- Report findings to DERM

Note: Refer to Guidelines for Plan A

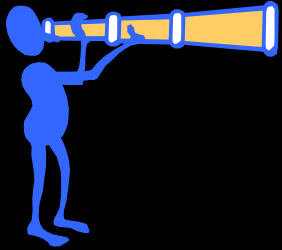


# *DERM's Implementation Plan for the SSES Large Facilities*

## **Plan B**

- Phase 1: Evaluation and Minor Repairs
- Phase 2: Investigation of Point Sources of I/I
- Phase 3: Repairs
- Phase 4: Re-measure Flow After Repairs
- Phase 5: Additional Repairs OR Cost-Benefit Analysis (If necessary)

Note: Refer to Guidelines for Plan B



# *SSES - Large Facilities*

## *Plan B*

### Phase 1: Evaluation and Minor Repairs

- Measure sanitary sewer system piping
- Flow measurement and smoke testing
- Computation of allowed I/I Rate
- Manhole inspection
  - If I/I is less than allowed I/I rate, then No Further Action Required until next cycle
- Report findings to DERM

# *Sanitary Sewer Evaluation Survey (SSES)*

## *Plan B*

### Notes:

- DERM requires that all wet season flow measurements for the survey must be taken during the period between June 15 and September 15
- Coastal areas must measure flow during HIGH TIDE
- All flow measurements shall be taken continuously for a period of at least three (3) days
- Readings shall be taken by qualified personnel using approved methods
- DERM must be notified at least three days prior to flow measurement or smoke testing
- DERM may monitor flow measurement



# *SSES - Large Facilities*

## *Plan B*

### Phase 2: Investigation of Point Sources of I/I

- If the Measured I/I rate is greater than the allowed rate, additional investigation is required to locate all point sources of I/I
- Investigation may include:
  - Line isolation
  - TV inspection of lines
  - Smoke testing
  - Dye testing
  - Surface investigation
- Report findings to DERM

# *SSES - Large Facilities*

## *Plan B*



### Phase 3: Repairs

- After all point sources of I/I are located, Corrective Actions are Required.
- Required work in this phase shall include correction of point source problems, including:
  - repair of crushed or broken pipes
  - properly sealing cleanout caps
  - correcting improper connections of stormwater drains and sewers
  - repair of visible inflow sources into manholes
  - any other specific actions as directed by DERM, such as the installation of MH inserts

# *SSES - Large Facilities*

## *Plan B*

### Phase 4: Re-measure Flow After Repairs

- Re-measure flow after repairs
- If I/I is less than the allowed I/I rate, then No Further Action Required until next cycle
- Report findings to DERM

Note: Must be completed before September 15, 2002

# *SSES - Large Facilities*

## *Plan B*

### Phase 5: Additional Repairs OR Cost-Benefit Analysis

- If re-measured flow is still larger than the allowed I/I rate, then:

- Additional corrective actions shall be taken

- Report Plan and Schedule to DERM

OR

- A Cost-Benefit Analysis shall be Submitted to DERM for review

- CBA shall be based on an estimated cost of the corrective action compared to  
*120 x Monthly per gallon Rate x estimated reduction in I/I*

- Make repairs where Cost-Benefit ratio is positive



## *Sample of Cost-Benefit Analysis*

Cost of Repairs: \$3,000

Amount of I/I reduction if repairs are done: 1,000 gpd

Monthly Sewage Rate: \$2.50 per 1,000 gal

Period for Analysis: 10 years (120 months)

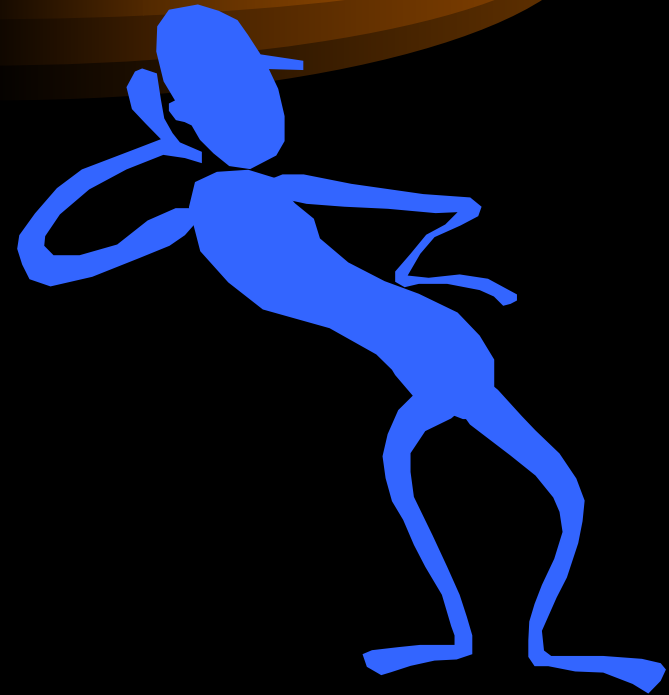
$CB = 1,000 \text{ g/day} \times 30 \text{ day/month} \times 120 \text{ months} \times \$2.50 / 1,000 \text{ gal}$

$CB = \$9,000$

Since the Calculated Benefit is greater than the Cost of Repairs, the Repair must be done.

## *Where Can I Find Help for the SSES?*

- Yellow Pages
  - Environmental Consultants
  - Plumbing Contractors
  - Pumping Contractors
- Associations
  - Florida Rural Water Association
    - (850) 668-2746



# *Additional Questions?*



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